

**ABSTRACT**

A system and method for using inverse mathematical principles in the analysis of compatible datasets so that correlations and trends within and between said datasets can be uncovered. The present invention is tailored to the analysis of datasets that are 5 extremely large; result from passive, privacy-secure, or anonymous, data collection; and are relatively unbiased. Correlations and trends uncovered by such analysis can be further examined by data mining and prediction portions of the present invention, which uncover and make use of interrelated rules that determine data structures. An embodiment directed toward analysis of television viewership and marketing data that 10 does this while still respecting privacy concerns is disclosed. In a preferred embodiment, a satellite, internet, cable, or other content provider can provide a viewer with a set-top box which may be specially instrumented to allow monitoring, recording, and transmission of set-top box events. While the analysis of television viewership and marketing data is presently preferred, it will be apparent to one skilled in the art that the 15 system and method herein can be employed to other data collection and data analysis scenarios. Other contemplated embodiments include, but are not limited to, privacy-secure actuarial analysis, radio and Internet market data collection, and even consumer behavioral predictions for advanced marketing techniques.